

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S1	1764	455/63.4,575.7,562.1,25.cds.	US-PGPUB; USPAT; USOCR	OR	ON	2005/09/02 10:49
S2	1313	S1 and (increas\$3 elevat\$3 near4 (side\$lobe))	US-PGPUB; USPAT; USOCR	OR	ON	2005/12/21 21:56
S3	4	(increas\$3 elevat\$3) near2 (power strength) near2 (side\$lobe)	US-PGPUB; USPAT; USOCR	OR	ON	2005/09/02 11:05
S4	6	(increas\$3 elevat\$3) near4 (power strength) near4 (side\$lobe)	US-PGPUB; USPAT; USOCR	OR	ON	2005/09/02 13:36
S5	39	(increas\$3 elevat\$3) with (power strength) with (side\$lobe)	US-PGPUB; USPAT; USOCR	OR	ON	2005/09/02 13:39
S6	1764	455/63.4,575.7,562.1,25.cds.	US-PGPUB; USPAT; USOCR	OR	ON	2005/09/02 14:48
S7	4	S6 and S5	US-PGPUB; USPAT; USOCR	OR	ON	2005/09/02 13:39
S8	47	(increas\$3 elevat\$3 rais\$3) with (power strength) with (side\$lobe)	US-PGPUB; USPAT; USOCR	OR	ON	2005/09/02 13:41
S9	4	S6 and S8	US-PGPUB; USPAT; USOCR	OR	ON	2005/09/02 13:39
S10	143	(power) near4 (side\$lobe)	US-PGPUB; USPAT; USOCR	OR	ON	2005/09/02 13:41
S11	7	S6 and S10	US-PGPUB; USPAT; USOCR	OR	ON	2005/09/02 14:23
S12	102	455/63.4.cds.	US-PGPUB; USPAT; USOCR	OR	ON	2005/09/02 14:25
S13	9	455/63.4.ccls. and covariance	US-PGPUB; USPAT; USOCR	OR	ON	2005/12/21 20:49
S14	11	(smart adj2 antenna\$1) same (side\$lobe\$1)	US-PGPUB; USPAT; USOCR	OR	ON	2005/09/02 14:45
S15	0	(smart adj2 antenna\$1) same (side\$lobe\$1) same Butler	US-PGPUB; USPAT; USOCR	OR	ON	2005/09/02 14:31
S16	41927	(smart adj2 antenna\$1) same (side\$lobe\$1) same1 Butler	US-PGPUB; USPAT; USOCR	OR	ON	2005/12/21 21:03
S17	11	(smart adj2 antenna\$1) same (side\$lobe\$1)	US-PGPUB; USPAT; USOCR	OR	ON	2005/09/02 14:32
S18	41927	((smart adj2 antenna\$1) same (side\$lobe\$1)) same1 Butler	US-PGPUB; USPAT; USOCR	OR	ON	2005/09/02 14:39
S19	2	((smart adj2 antenna\$1) same (side\$lobe\$1)) and Butler	US-PGPUB; USPAT; USOCR	OR	ON	2005/09/02 14:32

S20	2	((smart adj2 antenna\$1) same (side\$lobe\$1)) and Butler	US-PGPUB; USPAT; USOCR	OR	ON	2005/09/05 17:33
S21	1	("20020181492").PN.	US-PGPUB; USPAT	OR	OFF	2005/09/02 14:47
S22	1	null\$widening	US-PGPUB; USPAT; USOCR	OR	ON	2005/09/02 14:47
S23	18	S6 and (null near2 (increas\$3 wid\$5 expand\$3 chang\$3 adjust\$3))	US-PGPUB; USPAT; USOCR	OR	ON	2005/09/02 14:56
S24	2378	(smart adaptive) adj2 antenna\$1	US-PGPUB; USPAT; USOCR	OR	ON	2005/09/02 15:10
S25	57	S24 same (side\$lobe\$1)	US-PGPUB; USPAT; USOCR	OR	ON	2005/09/02 15:04
S26	5	S25 and (butler) and null	US-PGPUB; USPAT; USOCR	OR	ON	2005/09/05 20:14
S27	997	(smart) adj2 antenna\$1	US-PGPUB; USPAT; USOCR	OR	ON	2005/09/02 15:10
S28	997	smart adj2 antenna\$1	US-PGPUB; USPAT; USOCR	OR	ON	2005/09/02 15:11
S29	138	(smart adj2 antenna\$1) near2 adaptive	US-PGPUB; USPAT; USOCR	OR	ON	2005/09/02 15:12
S30	3	((("6393303") or ("6735445") or ("20020181492"))).PN.	US-PGPUB; USPAT	OR	OFF	2005/09/02 15:15
S31	1	("6735445").PN.	US-PGPUB; USPAT	OR	OFF	2005/09/05 18:26
S32	0	S31 and ((smart adj2 antenna\$1) and (side\$lobe\$1)) and Butler	US-PGPUB; USPAT; USOCR	OR	ON	2005/09/05 17:34
S33	1	S31 and (smart adj2 antenna\$1)	US-PGPUB; USPAT; USOCR	OR	ON	2005/09/05 18:51
S34	1	("6393303").PN.	US-PGPUB; USPAT	OR	OFF	2005/09/05 18:16
S35	0	S34 and (smart adj2 antenna\$1)	US-PGPUB; USPAT; USOCR	OR	ON	2005/09/05 18:16
S36	0	S34 and (adaptive adj2 antenna\$1)	US-PGPUB; USPAT; USOCR	OR	ON	2005/09/05 18:54
S37	1	("20040235529").PN.	US-PGPUB; USPAT	OR	OFF	2005/09/05 18:26
S38	1	S31 and (smart adj2 antenna\$1) and power	US-PGPUB; USPAT; USOCR	OR	ON	2005/09/05 18:51
S39	1	S34 and power	US-PGPUB; USPAT; USOCR	OR	ON	2005/09/05 19:37
S40	0	S34 and power and side\$lobe	US-PGPUB; USPAT; USOCR	OR	ON	2005/09/05 19:07

S41	0	S34 and power and side\$lobes	US-PGPUB; USPAT; USOCR	OR	ON	2005/12/21 21:09
S42	16	"smart antenna" near2 sdma	US-PGPUB; USPAT; USOCR	OR	ON	2005/09/05 19:10
S43	1	S34 and "base station"	US-PGPUB; USPAT; USOCR	OR	ON	2005/09/05 19:49
S44	1	S34 and butler	US-PGPUB; USPAT; USOCR	OR	ON	2005/09/05 20:12
S45	1	S34 and butler	US-PGPUB; USPAT; USOCR	OR	ON	2005/09/05 20:12
S46	0	S31 and butler	US-PGPUB; USPAT; USOCR	OR	ON	2005/09/05 20:12
S47	116	(transmit send\$3) near4 side\$lobe\$1	US-PGPUB; USPAT; USOCR	OR	ON	2005/09/05 20:17
S48	0	S47 same ((increas\$3 modif\$4 chang\$3 adjust\$3) near4 weight)	US-PGPUB; USPAT; USOCR	OR	ON	2005/09/05 20:16
S49	0	S47 same ("weight matrix")	US-PGPUB; USPAT; USOCR	OR	ON	2005/09/05 20:17
S50	1	S47 and ("weight matrix")	US-PGPUB; USPAT; USOCR	OR	ON	2005/09/05 20:18
S51	4227	("weight matrix")	US-PGPUB; USPAT; USOCR	OR	ON	2005/09/05 20:18
S52	0	("weight matrix") same side\$lobe	US-PGPUB; USPAT; USOCR	OR	ON	2005/09/05 20:18
S53	0	"weight matrix" same side\$lobe	US-PGPUB; USPAT; USOCR	OR	ON	2005/09/05 22:11
S54	16	"weight matrix" and side\$lobe	US-PGPUB; USPAT; USOCR	OR	ON	2005/09/05 20:51
S55	1	("6393303").PN.	US-PGPUB; USPAT	OR	OFF	2005/09/05 20:49
S56	0	S55 and "weight"	US-PGPUB; USPAT; USOCR	OR	ON	2005/09/05 20:49
S57	173	"weight matrix" near2 "W="	US-PGPUB; USPAT; USOCR	OR	ON	2005/09/05 20:55
S58	1	("20040235529").PN.	US-PGPUB; USPAT	OR	OFF	2005/09/05 20:56
S59	1	"20040235529".pn. and "weight matrix"	US-PGPUB; USPAT; USOCR	OR	ON	2005/09/05 20:57
S60	1	"20040235529".pn. and "Downlink Beamforming Matrix"	US-PGPUB; USPAT; USOCR	OR	ON	2005/09/05 21:02
S61	16	"Steering Matrix" near2 "A="	US-PGPUB; USPAT; USOCR	OR	ON	2005/09/05 21:04

S62	2	"Weight Matrix" near4 (expand\$3 modif\$4 increas\$3) near4 size	US-PGPUB; USPAT; USOCR	OR	ON	2005/09/05 21:06
S63	2	"Weight Matrix" near6 (expand\$3 modif\$4 increas\$3) near6 size	US-PGPUB; USPAT; USOCR	OR	ON	2005/09/05 21:06
S64	2	"Weight Matrix" near6 (expand\$3 modif\$4 increas\$3 adjust\$3) near6 size	US-PGPUB; USPAT; USOCR	OR	ON	2005/09/05 21:07
S65	23	"Weight Matrix" with (expand\$3 modif\$4 increas\$3 adjust\$3) with size	US-PGPUB; USPAT; USOCR	OR	ON	2005/09/05 21:14
S66	300	"Weight Matrix" with (expand\$3 modif\$4 increas\$3 adjust\$3)	US-PGPUB; USPAT; USOCR	OR	ON	2005/09/05 21:16
S67	23	"Weight Matrix" with (expand\$3 modif\$4 increas\$3 adjust\$3 bigger) with size	US-PGPUB; USPAT; USOCR	OR	ON	2005/09/05 22:18
S68	28080	"Weight" with (expand\$3 modif\$4 increas\$3 adjust\$3 bigger) with size	US-PGPUB; USPAT; USOCR	OR	ON	2005/09/05 21:32
S69	35	(Weight adj2 Matrix) with (expand\$3 modif\$4 increas\$3 adjust\$3 bigger) with size	US-PGPUB; USPAT; USOCR	OR	ON	2005/09/05 21:33
S70	0	"Butler matrix" near4 weight same side\$lobe	US-PGPUB; USPAT; USOCR	OR	ON	2005/09/05 22:13
S71	4	dummy near4 side\$lobe\$1	US-PGPUB; USPAT; USOCR	OR	ON	2005/09/05 22:13
S72	23	"Weight Matrix" with (chang\$3 expand\$3 modif\$4 increas\$3 adjust\$3 bigger) with size	US-PGPUB; USPAT; USOCR	OR	ON	2005/09/05 22:22
S73	27	"Weight Matrix" near2 is	US-PGPUB; USPAT; USOCR	OR	ON	2005/09/05 22:19
S74	1764	455/63.4,575.7,562.1,25.ccls.	US-PGPUB; USPAT; USOCR	OR	ON	2005/09/05 22:22
S75	38	S74 and (weight with (chang\$3 expand\$3 modif\$4 increas\$3 adjust\$3 bigger) with size)	US-PGPUB; USPAT; USOCR	OR	ON	2005/09/05 22:28
S76	12	S74 and (weight with (chang\$3 expand\$3 modif\$4 increas\$3 adjust\$3 bigger) with size same matrix)	US-PGPUB; USPAT; USOCR	OR	ON	2005/12/21 21:06
S77	39	(increas\$3 elevat\$3) with (power strength) with (side\$lobe)	US-PGPUB; USPAT; USOCR	OR	ON	2005/09/05 22:41
S78	314	side\$lobe\$1 same weight	US-PGPUB; USPAT; USOCR	OR	ON	2005/09/05 22:41
S79	1	side\$lobe\$1 same weight same matrix same (adjust\$3 modif\$4 expand\$4 increas\$3) same size	US-PGPUB; USPAT; USOCR	OR	ON	2005/09/05 22:43
S80	1	("20040235529").PN.	US-PGPUB; USPAT	OR	OFF	2005/09/05 22:43
S81	1	S80 and "Weight Matrix"	US-PGPUB; USPAT; USOCR	OR	ON	2005/09/05 22:48

S82	0	455/562.cds.	US-PGPUB; USPAT; USOCR	OR	ON	2005/09/05 22:49
S83	601	(increas\$3 rais\$3 elevat\$3) near4 side\$lobe\$1	US-PGPUB; USPAT; USOCR	OR	ON	2005/09/05 22:52
S84	22	(increas\$3 rais\$3 elevat\$3) near4 side\$lobe\$1 near4 power	US-PGPUB; USPAT; USOCR	OR	ON	2005/09/05 22:57
S85	7	(generat\$3 creat\$3 induc\$3) near4 side\$lobe\$1 near4 power	US-PGPUB; USPAT; USOCR	OR	ON	2005/12/21 21:30
S86	0	"6542519".pn. and "null widening"	US-PGPUB; USPAT; USOCR	OR	ON	2005/09/05 23:36
S87	0	"6542519".pn. and "null"	US-PGPUB; USPAT; USOCR	OR	ON	2005/09/05 23:37
S88	1	"6839573".pn. and "null"	US-PGPUB; USPAT; USOCR	OR	ON	2005/09/05 23:53
S89	7	"zero forcing" same beamforming	US-PGPUB; USPAT; USOCR	OR	ON	2005/09/06 00:17
S90	1	maximum near2 SINR near2 beamformer	US-PGPUB; USPAT; USOCR	OR	ON	2005/09/06 00:19
S91	1	(maximum near2 SINR) with beamformer	US-PGPUB; USPAT; USOCR	OR	ON	2005/09/06 00:19
S92	1	(maximum near2 SINR) same beamformer	US-PGPUB; USPAT; USOCR	OR	ON	2005/09/06 00:55
S93	701523	+	US-PGPUB; USPAT; USOCR	OR	ON	2005/09/06 00:55
S94	503	455/575.7.cds.	US-PGPUB; USPAT; USOCR	OR	ON	2005/12/21 19:41
S95	116	455/63.4.cds.	US-PGPUB; USPAT; USOCR	OR	ON	2005/12/21 19:43
S96	0	455/572.1.cds.	US-PGPUB; USPAT; USOCR	OR	ON	2005/12/21 19:44
S97	1110	455/562.1.cds.	US-PGPUB; USPAT; USOCR	OR	ON	2005/12/21 21:38
S98	12267	(directional near3 antenna)	US-PGPUB; USPAT; USOCR	OR	ON	2005/12/21 22:00
S99	204594	(hid\$3 hidden)	US-PGPUB; USPAT; USOCR	OR	ON	2005/12/21 20:43
S10 0	136383	collid\$3 collision	US-PGPUB; USPAT; USOCR	OR	ON	2005/12/21 20:44
S10 1	23744	S100 near5 (prevent\$3 avoid\$3)	US-PGPUB; USPAT; USOCR	OR	ON	2005/12/21 20:45

S10 2	42	S98 same S101	US-PGPUB; USPAT; USOCR	OR	ON	2005/12/21 20:45
S10 3	6	S98 same S99 near4 (signal beam)	US-PGPUB; USPAT; USOCR	OR	ON	2005/12/21 20:46
S10 4	10	455/63.4.ccls. and covariance	US-PGPUB; USPAT; USOCR	OR	ON	2005/12/21 20:49
S10 5	2	((smart adj2 antenna\$1) same (side\$lobe\$1)) and Butler	US-PGPUB; USPAT; USOCR	OR	ON	2005/12/21 21:03
S10 6	1871	455/63.4,575.7,562.1,25.ccls.	US-PGPUB; USPAT; USOCR	OR	ON	2005/12/21 21:06
S10 7	13	S106 and (weight with (chang\$3 expand\$3 modif\$4 increas\$3 adjust\$3 bigger) with size same matrix)	US-PGPUB; USPAT; USOCR	OR	ON	2005/12/21 21:06
S10 8	1	("6393303").PN.	US-PGPUB; USPAT	OR	OFF	2005/12/21 21:11
S10 9	0	S108 and power and side\$lobes	US-PGPUB; USPAT; USOCR	OR	ON	2005/12/21 21:11
S11 0	13	(generat\$3 creat\$3 induc\$3) near6 side\$lobe\$1 near4 power	US-PGPUB; USPAT; USOCR	OR	ON	2005/12/21 21:27
S11 1	34	(generat\$3 creat\$3 induc\$3 produc\$3) near6 side\$lobe\$1 near4 power	US-PGPUB; USPAT; USOCR	OR	ON	2005/12/21 21:31
S11 2	304	455/25.ccls.	US-PGPUB; USPAT; USOCR	OR	ON	2005/12/21 21:39
S11 3	336927	S112 anf (S99 S100)	US-PGPUB; USPAT; USOCR	OR	ON	2005/12/21 21:39
S11 4	9	S112 and (S99 S100)	US-PGPUB; USPAT; USOCR	OR	ON	2005/12/21 21:39
S11 5	1871	455/63.4,575.7,562.1,25.ccls.	US-PGPUB; USPAT; USOCR	OR	ON	2005/12/21 21:56
S11 6	1397	S115 and (increas\$3 elevat\$3 near4 (side\$lobe))	US-PGPUB; USPAT; USOCR	OR	ON	2005/12/21 21:57
S11 7	180	S116 and beamforming	US-PGPUB; USPAT; USOCR	OR	ON	2005/12/21 21:57
S11 8	3109	beamforming	US-PGPUB; USPAT; USOCR	OR	ON	2005/12/21 22:00
S11 9	515	"455"/\$.ccls. and beamforming	US-PGPUB; USPAT; USOCR	OR	ON	2005/12/21 22:05
S12 0	27	"455"/69.ccls. and beamforming	US-PGPUB; USPAT; USOCR	OR	ON	2005/12/21 22:14
S12 1	1	(beamform\$3 and power and butler and smart and antenna). clm.	US-PGPUB; USPAT; USOCR	OR	ON	2005/12/21 22:14